

Public Service Company
RPU-91-6
Income Statement--Electric

Schedule 4
Page 1 of 8
Final Rates

Line No.	Description	Per Books	Amort. of Unbilled Revenue	Bad Check Charge	Bulk Power Sales	Deere Contract	Lost Margins--Energy Eff.
		(A)	(B)	(C)	(D)	(E)	(F)
Revenues:							
1	Rate Revenue	229,975,981		4,870	(10,780,803)	144,387	0
2	Other Revenue	5,154,214	0				
3	Total Revenue	235,130,195	0	4,870	(10,780,803)	144,387	0
Expenses:							
4	Fuel	49,590,334			(8,148,207)	(394,072)	0
5	Payroll	30,283,810					
6	Other O & M	40,568,263			(762,781)		
7	Depreciation	28,400,586					
8	Other Taxes	19,599,957					
9	Income Taxes--Federal	9,221,135		1,487	(571,042)	164,445	0
10	State	3,066,639		495	(190,160)	54,761	0
11	Deferred	1,521,401	0				
12	ITC	(1,598,870)					
13	Total Expenses	180,653,255	0	1,983	(9,672,190)	(174,865)	0
14	OPERATING INCOME	54,476,940	0	2,887	(1,108,613)	319,252	0
SOURCES:							
	Heinrichs		Settlement	Settlement	Settlement	Settlement	Settlement
	Sch. A, p. 1						

Iowa Public Service Company
RPU-91-6
Income Statement--Electric

Page 587 of 654
MidAmerican Exhibit 8.1

Schedule 4
Page 2 of 8
final Rates

Line No.	Description	Reconnect fee	Advertising	Asbestos Removal	Bonus 12	Chamber Dues	Charitable Donations
		(G)	(H)	(I)	(J)	(K)	(L)
Revenues:							
1	Rate Revenue	13,095					
2	Other Revenue						
3	Total Revenue	13,095	0	0	0	0	0
Expenses:							
4	Fuel						
5	Payroll						
6	Other O & M		(375,939)	431,432	38,296	(7,253)	0
7	Depreciation			17,111			
8	Other Taxes						
9	Income Taxes--Federal	3,999	114,812	(136,985)	(11,696)	2,215	0
10	State	1,332	38,233	(45,617)	(3,895)	738	0
11	Deferred						
12	ITC						
13	Total Expenses	5,331	(222,894)	265,941	22,706	(4,300)	0
14	OPERATING INCOME	7,764	222,894	(265,941)	(22,706)	4,300	0
SOURCES:							
		Settlement	Settlement	Settlement	Settlement	Settlement	Settlement

Public Service Company
RPU-91-6
Income Statement--Electric

Schedule 4
Page 3 of 8
Final Rates

Line No.	Description	Claim of Right	Clean Air Act	Coal Mill Annualization	Computer Costs	Corporate Headquarters Alloc.	Interest on Customer Deposits
		(M)	(N)	(O)	(P)	(Q)	(R)
Revenues:							
1	Rate Revenue						
2	Other Revenue						
3	Total Revenue	0	0	0	0	0	0
Expenses:							
4	Fuel						
5	Payroll						
6	Other O & M		0	(29,167)	367,702	(131,754)	131,744
7	Depreciation		0	54,208			
8	Other Taxes			7,378			
9	Income Taxes--Federal	432,367	0	(9,901)	(112,296)	40,238	(40,235)
10	State	0	0	(3,297)	(37,395)	13,399	(13,398)
11	Deferred						
12	ITC						
13	Total Expenses	432,367	0	19,221	218,011	(78,117)	78,111
14	OPERATING INCOME	(432,367)	0	(19,221)	(218,011)	78,117	(78,111)
SOURCES:							
		Settlement	Settlement	Settlement	Settlement	Settlement	Settlement

Public Service Company
RPU-91-6
Income Statement--Electric

Schedule 4
Page 5 of 8
Final Rates

Line No.	Description	Injuries & Damages	Interest Synchronization	Merger Costs	Merger Savings	Minimum Bank Balances	Misc. Work Orders
		(Y)	(Z)	(AA)	(AB)	(AC)	(AD)
Revenues:							
1	Rate Revenue						
2	Other Revenue						
3	Total Revenue	0	0	0	0	0	0
Expenses:							
4	Fuel						
5	Payroll						
6	Other O & M	0		(1,063,362)	(759,955)	63,069	
7	Depreciation						81,372
8	Other Taxes						11,369
9	Income Taxes--Federal	0	1,739,642	18,363	232,090	(19,261)	(28,323)
10	State	0	579,311	6,115	77,287	(6,414)	(9,432)
11	Deferred						
12	ITC						
13	Total Expenses	0	2,318,953	(1,038,884)	(450,577)	37,394	54,986
14	OPERATING INCOME	0	(2,318,953)	1,038,884	450,577	(37,394)	(54,986)
SOURCES:							
	Settlement	Settlement	Settlement	Ex. 202, Sch. 4	Board Sch. 4b	Settlement	Settlement

Iowa Public Service Company
RPU-91-6
Income Statement--Electric

Schedule 4
Page 6 of 8
Final Rates

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Public Service Company
RPU-91-6
Income Statement--Electric

Schedule 4
Page 7 of 8
Final Rates

Line No.	Description	Office Salaries Increase	Self-Insured Health Plan	Unbilled Rev. Accrual	Unbilled Rev. Phase-in	Union Salaries Increase	Utility Corrections
		(AM)	(AN)	(AO)	(AP)	(AQ)	(AR)
Revenues:							
1	Rate Revenue			0			
2	Other Revenue						
3	Total Revenue	0	0	0	0	0	0
Expenses:							
4	Fuel						
5	Payroll	564,815				748,440	
6	Other O & M		762,312				478,357
7	Depreciation	0				0	
8	Other Taxes						3,748
9	Income Taxes--Federal	(172,495)	(232,810)	0	(615,695)	(228,574)	(147,235)
10	State	(57,442)	(77,527)	0	(205,030)	(76,116)	(49,030)
11	Deferred				1,030,795		
12	ITC						
13	Total Expenses	334,879	451,975	0	210,070	443,750	285,840
14	OPERATING INCOME	(334,879)	(451,975)	0	(210,070)	(443,750)	(285,840)
SOURCES:							
		Settlement	Settlement	Settlement	Settlement	Settlement	Settlement

Iowa Public Service Company
RPU-91-6
Income Statement--Electric

MidAmerican Exhibit 8.1

Schedule 4
Page 8 of 8
Final Rates

Line No.	Description	Unit Sharing-- Deere	Change in Customer Level	Storm Damage	Adjusted Income Stmt.	Adjustments
		(AS)	(AT)	(AU)	(AV)	
Revenues:						
1	Rate Revenue	0	370,291		219,844,993	(10,130,988)
2	Other Revenue				5,154,214	0
3	Total Revenue	0	370,291	0	224,999,207	
Expenses:						
4	Fuel	0			41,048,055	(8,542,279)
5	Payroll				31,597,065	1,313,255
6	Other O & M			625,993	41,150,844	582,581
7	Depreciation			121,826	28,717,216	316,630
8	Other Taxes				19,938,889	338,932
9	Income Taxes--Federal	0	113,087	(228,384)	9,255,455	34,320
10	State	0	37,659	(76,053)	2,934,950	(131,689)
11	Deferred				2,552,196	1,030,795
12	ITC				(1,598,870)	0
13	Total Expenses	0	150,745	443,382	175,595,800	(5,057,455)
14	OPERATING INCOME	0	219,546	(443,382)	49,403,407	(5,073,533)
SOURCES:						
		Settlement	Settlement	Settlement		

Iowa Service Company
RPU-91-6
Interest Synchronization--Electric

Schedule 4a
Final Rates

Line No.	Description	Amount
1	Rate Base	464,786,101
2	Cost of LT Debt	4.193%
3	Interest on Rate Base	19,489,986
	Interest Expense	
4	per Company	25,186,259
5	Difference	(5,696,273)
6	Federal Income Tax	1,739,642
7	State Income Tax	579,311

SOURCE: Heinrichs, Sch. 2, p. 2

Iowa Public Service Company
 RPU-91-6
 Merger Related Savings

Schedule 40
 Page 1 of 2
 Final Rates

Line
 No.

1	Labor loading rate per L. Smith	35.45%
2	Approximate Labor loading for FICA and Fringes per K. Heinrichs	18.72%

3	Difference needing to be reflected in merger savings adjustment	16.73%
4	Merger Savings--Labor	2,002,672
5	Loading rate	1.3545

6	Base labor before loadings	1,478,532
7	Portion of loading not reflected per K. Heinrichs	16.73%

8	Additional labor savings needing to be reflected in test year	247,384
9	Plus: Non-labor savings	820,784
10	Less: Capital, net of depreciation	(305,920)
11	Below-the-line items	(2,293)

12	TOTAL MERGER SAVINGS	759,955

SOURCES: Ex. 202, Schedules 5 & 6; LMS workpaper 211;
 Heinrichs Schedules T, U, AP, revised Schedule AL;
 Settlement, Article VII, Items 19, 20, 34 & 38.

CALCULATION

HEINRICH'S LOADING:

Schedule 4b

Page 2 of 2

Final Rates

	Wages	FICA	401k
	-----	-----	-----
Non-Union	564,815	48,509	22,952
Union	748,440	68,173	44,261
Life & Worker Comp			61,490
FUTA & SUTA		434	
	-----	-----	-----
TOTALS	1,313,255	117,116	128,703
	*****	*****	*****

Loading per Heinrichs:

FICA/Payroll Taxes 117,116

401k/Fringes 128,703

Total Loading 245,819

Divided by total wages 1,313,255

Loading Factor per Heinrichs 18.72%

DOCKET NO. RPU-85-14

STATE OF IOWA

IOWA STATE COMMERCE COMMISSION

IN RE:

IOWA PUBLIC SERVICE COMPANY

DOCKET NO. RPU-85-14

DECISION AND ORDER

(Issued April 28, 1986)

APPEARANCES:

SUZAN M. STEWART, E. PHIL VONDRAK, IRA E. DELK, Iowa Public Service Company, P.O. Box 778, Sioux City, Iowa 51102, appearing for the applicant.

ROBERT R. EIDSMOE, Gleysteen, Harper, Eidsmoe, Heidman and Redmond, 200 Home Federal Building, P.O. Box 3086, Sioux City, Iowa 51102, appearing for the Intervenor, Terra Chemicals International, Inc.

RONALD C. POLLE, ALICE J. HYDE, Office of Consumer Advocate, Fourth Floor, Lucas State Office Building, Des Moines, Iowa 50319, appearing for the Office of Consumer Advocate.

PROCEDURAL HISTORY

On June 28, 1985, Iowa Public Service Company (IPS or Company) filed a proposed gas tariff, which requested an increase in annual gas revenues of 7.92 percent or \$9,540,149 to become effective August 1, 1985. With that filing IPS included an application for an interim rate increase of 5 percent across-the-board, which would produce additional revenues of \$6,097,321 annually.

Terra Chemicals International, Inc. (Terra) filed a petition to intervene in this rate case on July 3, 1985, and the motion was granted on

rate case purposes. This Commission can and will impose a hypothetical capital structure in the face of such manipulation. In a business climate of continuing corporate diversification, we find it more appropriate to use the capital structure of the subsidiary. In this case, we shall use the common equity ratio of the subsidiary, IPS, which is 33.83 percent.

XI. RETURN ON EQUITY.

The parties used a discounted cash flow method to calculate the return on equity expected by investors. The parties disagreed on the compounding method, the growth element, and underwriting costs in their calculations. Using its compounding method, growth element, and underwriting costs, Company argued for a 15.75 percent return on equity. OCA argued for a 13.71 percent rate based upon its calculation elements. The Commission is not bound by the recommendations of the parties when the record, as here, supports another conclusion.

We conclude that 13.01 percent is the proper return on equity in this case. We arrive at that rate by adopting the average test year dividend yield of 10.72 percent as calculated by OCA witness Habr (Tr. 309) and by a slight modification to his calculation of sustainable growth rate. Dr. Habr used the average of the 14-year earnings per share (EPS) growth rate and the average of the internal (br) growth rate for 1971 to 1983 of Midwest Energy Company, the parent company, to calculate the sustainable growth rate. The OCA calculation does not pay adequate attention to Company's recent experience, which is of paramount concern to investors. We adopt a sustainable growth rate of 2.29 percent, calculated by taking the average of the 5-year EPS, 10-year EPS, 5-year br, and the 10-year br as listed in Dr. Habr's Exhibit 103, Schedule 4, page 1. No underwriting

costs are included in this calculation. The return on equity should be the test year dividend yield of 10.72 percent, plus the sustainable growth rate, 2.29 percent.

XII. OFFICIAL NOTICE OF MANAGEMENT EFFICIENCY REPORT.

The Commission took official notice in this docket of the management efficiency report for the years 1983 and 1984, prepared pursuant to 250 Iowa Admin. Code Section 29.3. It is our express position that the factual data in the management efficiency reports will be considered and must be considered in our ratemaking decisions. Iowa Code § 17A.14(4) (1985) clearly contemplates that official notice can be taken of factual data which is within the specialized knowledge of the agency. The data in these reports is within the specialized knowledge of the Commission. We will continue to take official notice of these reports in every docket where appropriate. Having clarified our position with regard to our ability to take official notice of the management efficiency reports, we do not find adequate evidence in the record before us to impose any adjustment for deficiencies in managing this Company.

While we lack evidence sufficient to support an adjustment, we are not satisfied with Company's response to the changes in the natural gas market. The Company should not regard its residential customers as a security blanket to pick up all costs, regardless of what happens to industrial sales. Aggressive marketing is necessary to maintain industrial sales. Company acknowledges a decline in sales. (Tr. 35). If the Company continues to lose sales, the stockholders should expect to bear some of the risk of loss. In addition, the Company does not appear to have done anything to reduce peaks. (See Tr. 34-35). Peak control will be increasingly vital to adequate operations in order to avoid what will

DOCKET NOS. RPU-82-12

STATE OF IOWA
IOWA STATE COMMERCE COMMISSION

IN RE:

IOWA POWER AND LIGHT COMPANY

DOCKET NO. RPU-82-12

DECISION AND ORDER

(Issued February 10 , 1983)

APPEARANCES:

PAMELA L. PRAIRIE, Attorney, Iowa Power and Light Company, P. O. Box 657, 666 Grand Avenue, Des Moines, Iowa 50308 and CURTIS L. RITLAND and DAVID L. JENKINS, Attorneys at Law (Bradshaw, Fowler, Proctor & Fairgrave), 11th Floor, Des Moines Building, Des Moines, Iowa 50309, appearing on behalf of Iowa Power and Light Company.

GARY D. STEWART, ALICE J. HYDE, and BEN STEAD, Assistant Commerce Counsel, Iowa State Commerce Commission, 5th Floor, Lucas State Office Building, Des Moines, Iowa 50319, appearing on behalf of the Commission Staff.

ROGER D. COLTON, Attorney at Law, 315 East Fifth Street, Suite 25, Des Moines, Iowa 50309, appearing on behalf of the Iowa Citizen/Labor Energy Coalition.

DON CARLSON, 1521 6th Avenue, Des Moines, Iowa 50319, appearing on behalf of Citizens for Community Improvement.

RUSSELL L. SWANSON and DAVID H. GOLDMAN, Attorneys at Law (Rogers, Phillips & Swanger) 510 Hubbell Building, Des Moines, Iowa 50309, appearing on behalf of Iowa Manufacturers Association.

I. PROCEDURAL HISTORY

On April 13, 1982, Iowa Power and Light Company (Company), filed with the Iowa State Commerce Commission (Commission) proposed tariffs identified as TF-82-121. TF-82-121 represented a general rate increase of \$21.0

Docket No. RPU-82-12

Page 39

book/tax timing difference for which normalization is required at a rate of \$871,000 annually over the remainder of the five-year amortization period originally ordered.

2. Income Tax Effect Of Interest Component Of Capital Cost

Company and Staff agree an adjustment to Company's income taxes is necessary to reflect the effect of the change in the interest component of capital cost resulting from the Company's retirement of 3-1/4 percent \$8.4 million debt issue on May 15, 1982, and its issuance on April 27, 1982, of 14-7/8 percent, \$50 million bonds.

Company, consistent with its proposed use of a year-end capital structure, as adjusted, asserts the income tax effect of the interest component of capital cost should also reflect year end interest costs, as adjusted. Staff argues the income tax effect of the interest components of capital cost should be treated consistently with Staff's proposed capital structure.

Our decision to adopt Staff's proposed capital structure, for the reasons subsequently set forth, requires that we adopt Staff's proposed adjustment to income taxes to reflect the effect of the interest component on capital structure.

C. Summary

Based upon our findings with respect to contested issues discussed above, and including uncontested adjustments, we find the following schedule represents our findings of Company's jurisdictional operating revenue requirements:

Docket No. RPU-82-12

Page 40

IOWA POWER AND LIGHT COMPANY
RPU-82-12
COST OF SERVICE
(000)

Order

Operating Expenses:

Operation and Maintenance	\$129,306
Depreciation and Amortization	24,227
General Taxes	16,074
Income Taxes	20,773
Total Operating Expenses	\$190,380
Less: Non-Jurisdictional	535
Net Operating Income	\$ 53,961
Cost of Service	\$243,806

IV. RATE OF RETURN

Company and Staff disagree on the issue of what constitutes a fair rate of return. Company argues its evidence supports an "imputed" overall rate of return of 11.64 percent, and Staff asserts a fair overall rate of return for Company is 10.942 percent.

In resolving differences between Company's and Staff's rate of return proposals, we recognize the basic issues to be decided are: 1) the appropriate capital structure; 2) the embedded debt cost, and 3) the appropriate common equity cost. Arguments and evidence in support of each party's rate of return calculations are discussed below.

A. Capital Structure

Company proposes a capital structure composed of year-end balances, adjusted for long-term debt issued April 1982, should be used to

Docket No. RPU-82-12

Page 41

determine the overall rate of return because this capital structure reflects the latest available information and is the most reliable indicator of the conditions which will most likely prevail during the period the proposed rates will be in effect. Company asserts a pro forma adjustment to capital structure is necessary to fully reflect the April 27, 1982, issuance of \$50 million in bonds and the retirement of the \$8.4 million, 3-3/4 percent bond issue on May 15, 1982, and thus the proper cost of capital is 13.02 percent. However, Company argues that since it is seeking only a 9 percent rate increase, the use of either 1981 average costs and financial ratios or year-end pro forma costs and financial ratios should lead to an "imputed" cost of capital of 11.64 percent.

Staff submits the use of the test-year average capital structure, adjusted to recognize the rollover of certain long-term debt, should be adopted since it is consistent with Commission precedent. Staff argues the rollover of the \$8.4 million matured debt at the new embedded cost rate is a proper adjustment to test period average capital structure because it matches test-year capital costs with investment in rate base. Although much of the long-term debt will replace short-term debt in Company's capital structure, Staff notes that Company witness Mr. Glahn admitted the long-term debt issue will finance plant under construction. Staff argues Company's proposal to include the full \$50 million debt issue in test period capital structure should be rejected because the Allowance for Funds Used During Construction (AFUDC) will enable Company to recover the interest costs of the debt.

Docket No. RPU-82-12
Page 42

MidAmerican Exhibit 8.1
Page 601 of 654

Sound ratemaking principles require that the determination of a fair overall rate of return for the test period be based upon a proper matching of the investment in rate base and the test-year operating revenue, expenses, and taxes. We find the use of the test-year average capital structure best ensures compliance with the matching principle. In addition, we believe the adoption of Company's proposal to include the full \$50 million debt issue in its test-year capital structure would substantially overstate the debt investment in Company for the test period. We find Staff's proposal to rollover the \$8.4 million matured debt at the new embedded cost rate should be adopted because it allows Company to recover the increased costs of the new debt without mismatching test-periods capital costs and investment in rate base. Therefore, we shall adopt Staff's proposed capital structure in the calculation of a fair overall rate of return.

B. Cost Of Embedded Debt

Company's calculation of its cost of embedded debt on year-end figures includes an adjustment to long-term debt to include the full \$50 million debt issuance, which results in a cost of 9.268 percent. Company argues the adjustment is a known and measurable change, and failure to recognize the increased debt cost, which will exist when the rates are in effect, will penalize Company's prudent decision to delay the issuance of the bonds. Staff criticizes Company's calculation of embedded debt cost as failing to recognize gains and losses on reacquired debt, and as being

based upon the previously rejected yield-to-maturity method. Staff further points out Company's calculation of the cost of preferred stock is incorrect because it contains two mathematical errors.

Staff calculated Company's test-year average embedded debt costs to be 7.843 percent. Staff argues its calculation is consistent with our decision in Peoples Natural Gas Co., Docket No. RPU-81-26 (ISCC 1982) and is based upon the method consistently approved by the Commission. Staff adjusted its test-year average embedded debt cost calculation to reflect the rollover of the retired \$8.4 million debt at the new embedded cost rate of 14.718 percent, which increased the calculation of embedded debt cost to 8.204 percent. Staff asserts Company's proposed embedded debt cost, which includes the full \$50 million debt issuance that occurred outside of the test period, must be rejected, since capital costs must match test-year investment in rate base.

We find the evidence in the record establishes that Company's calculation of its cost of embedded debt should not be relied upon because it is inconsistent with Commission precedent and includes mathematical errors. We find Staff has correctly calculated Company's embedded debt cost. We also find the rollover of the \$8.4 million in matured debt at the new embedded cost rate is in accordance with sound ratemaking principles because it maintains a proper match of capital costs and investment in assets included in rate base during the test period which ensures reasonable and just rates. Therefore, we find Company's embedded debt cost is 8.204 percent.

Docket No. RPU-82-12

Page 44

C. Cost Of Common Equity

Company argues that since it is only seeking a 9 percent rate increase, its cost of equity should be set at 16 percent if all of its other rate of return proposals are adopted, which would result in an "imputed" overall rate of return of 11.64 percent. However, Company argues Dr. Soldofsky's testimony establishes the cost of common equity is 19.7 percent, which he adjusted upward to 21.0 percent. Dr. Soldofsky offered several approaches to determine Company's cost of common equity, including the maintenance of Times-Interest-Earned-After-Taxes Level, the Equity Debt Risk Premium, the Limited Horizon DCF, the Standard DCF Plus Allowance for Change in the Price/Earnings Ratio, and the Standard DCF formula.

Based on embedded debt interest costs, which were based upon Dr. Soldofsky's estimation of capitalization and debt levels, and a goal of 2.6 times after-tax interest coverage, Dr. Soldofsky projected common equity costs of 15.7 to 17.8 percent. Company witness Glahn also testified the return on equity must be high enough to improve coverage ratios to avoid bond down ratings. Staff correctly notes that we have consistently refused to rely on the coverage ratio approach in prior decisions. E.g., Iowa-Illinois, 46 P.U.R. 4th at 527-28. (ISCC 1982). As Staff points out in its brief, there was ample precedent for our decisions. (Staff brief at 68). In addition, Staff witness Dr. Szerszen's statistical analysis of bond ratings demonstrates few significant relationships with coupon rates. This provides additional support to our decision to disregard returns on common equity based on a coverage ratio approach.

Docket No. RPU-82-12

Page 45

Dr. Soldofsky also projected the return on common equity by adding a risk allowance, based upon a survey by Charles Bonore, directly to the cost of Aa utility bonds. Upon determining a 350 basis point adjustment to his projections of a 16.5 percent Aa bond rate, Dr. Soldofsky projected returns on common equity in a range from 17.8 to 22.2 percent. Staff sets forth several criticisms of the application of the methodology and the methodology itself.

We have in the past rejected on an equity-debt risk premium analysis. E.g., Re Davenport Water, Docket No. RPU-81-54 (ISCC 1982). The cost of equity can be more reliably established by examining the actual cost of common equity through DCF analysis, rather than by the equity-debt risk premium approach which depends upon fluctuating debt yields and estimates of risk premiums. Therefore, we will not rely on this method or projections based on this method in determining the cost of common equity.

Dr. Soldofsky has also introduced variations of the standard DCF formula to support his 19.7 percent projection of the cost of common equity.

Dr. Soldofsky's Limited Horizon DCF approach is based upon an estimate of dividend growth in a six-year period. Using this approach, Dr. Soldofsky determined a 4.0 to 6.0 percent growth rate was reasonable and concluded the cost of equity should be 17.3 to 24.1 percent. Staff criticized the use of a limited horizon method as being based on misconceptions and erroneous assumptions.

Docket No. RPU-82-12
Page 46

Dr. Soldofsky introduced another variation of the DCF model, by allowing for changes in the price/earnings ratio. By adding to dividend yield the five-year projected dividend growth rate and the three to five year projected price/earnings rate, Dr. Soldofsky predicted a 15.0 to 31.0 percent common equity cost. Staff argues Dr. Soldofsky's application of this DCF variation is speculative and unnecessary, since the standard DCF formula already reflects changes in risks.

The standard discounted cash flow (DCF) model is used to establish what returns an investor may reasonably expect from an investment under actual stock market conditions. The model establishes the cost of common equity by measuring the normal dividend yield (dividends per share divided by price per share) and adding an investor-expected growth rate. The model is expressed as follows:

$$K \text{ (cost of common equity)} = \frac{D \text{ (dividends per share)}}{P \text{ (market price per share)}} + G \text{ (growth rate)}$$

Both Company and Staff witnesses offered testimony as to Company's cost of common equity using this model.

Company witness Dr. Soldofsky projected a range of the cost of common equity from 14.1 to 19.7 percent based upon various combinations of dividend yields and growth rates. Staff argues Dr. Soldofsky's DCF calculations are unsupported by facts and data, and thus, his determination of the cost of common equity based upon this method is unsupported and should not be given any consideration.

Staff asserts its witness, Ms. Melissa Feldhaus, has correctly applied the DCF formula, and therefore, presents the only credible evidence from

Docket No. RPU-82-12
Page 47

which we can determine the cost of common equity. Ms. Feldhaus performed DCF analysis on Company alone and on similar Iowa utilities. In applying the DCF to Company, Ms. Feldhaus determined the proper dividend yield was 13 percent, rather than 13.43 percent based on year-end dividends, because the 13 percent yield better represented normal investor expectations. In calculating the growth factor, Ms. Feldhaus used an estimate of the growth in book value per share because mathematically, the growth in book value equals the expected growth rate. Ms. Feldhaus concluded a sustainable growth rate of 1.82 to 1.97 percent was reasonable, which resulted in a cost of common equity ranging from 14.82 to 14.97 percent. Ms. Feldhaus also calculated the cost of common equity to be 15.02 to 15.21 percent by measuring the growth rate for six similar Iowa utilities to provide additional support for her determination of the cost of common equity. On the basis of both of her DCF estimates, Staff concludes Company's cost of common equity is 15 percent. Staff offers Ms. Feldhaus' estimate of a 14.45 to 14.97 percent cost of common equity for 32 electric utilities from data presented by Dr. Soldofsky as a final check of the accuracy of its 15 percent cost of common equity. Staff asserts an adjustment to the cost of common equity to 15.148 percent is necessary to compensate Company for the cost of issuing additional shares of common stock, but claims no further adjustments are supported by the evidence.

Company argues Staff's calculation of Company's common equity costs is erred because Staff witness Feldhaus' use of only the 1981 market to book ratio in her growth rate computation is inconsistent with the use of

Docket No. RPU-32-12
Page 48

ten-year historical data for the other components of the growth rate. Company argues the cost of common equity resulting from the use of the market to book ratio for the last ten to fifteen years is 16.55 to 17.10 percent, which is within the range presented by Dr. Soldofsky. In summation, Company argues both Staff and Company agree its cost of common equity has increased since its last rate case, and the only issue is how much the cost has increased.

The reasons behind our decision to rely on the standard DCF model in determining the cost of common equity have been stated in several previous cases. See, e.g., Re Northwestern Bell Telephone Company, Docket No. RPU-80-40, Decision and Order, at 48. Dr. Soldofsky's application of the standard DCF methodology and his variations do not appear to be reliably supported by financial market data. We believe Staff's calculations of dividend yield and growth rates hit close to target and are supported by its evidence, and therefore, we find Company's cost of common equity should be set at 15 percent, which is within the range of reasonableness of capital costs based upon the record of this proceeding.

Both Staff and Company proposed upward adjustments to the cost of common equity for various items. However, we find no upward adjustments are supported by the evidence of this proceeding. The evidence indicates there will be no major stock issuance expenses incurred by Company in the near future, and thus, we find Staff's proposed .148 percent upward adjustment is unnecessary. (Exhibit 113). We find Dr. Soldofsky's proposed ten percent upward adjustment should also be rejected. Therefore, we find the total cost of common equity should be 15.0 percent.

D. Summary

Based upon our findings with respect to contested issues discussed above, Company's allowed overall rate of return is set at 10.883 percent.

Iowa Power and Light Company
Cost of Capital
RPU-82-12

	<u>Ratio</u>	<u>Cost</u>	<u>Weighted Cost</u>
Long-Term Debt	47.493%	8.204%	3.896%
Preferred Stock	12.578%	7.932%	0.998%
Common Equity	39.929%	15.0 %	5.989%
Total Cost			10.883%

V. RATE DESIGN

Company's tariff includes a proposed rider which provides for a ten percent discount in the monthly bills for electric service to qualified low income, elderly customers. Company argues the special discount meets the requirements of Iowa Code Section 475.5(1981) because it is limited to a definable class of customers. Company further asserts the impact of the discount on the customers who will be required to bear the cost of the discount is nominal.

Iowa Citizen/Labor Energy Coalition, Inc. (C/LEC), while not addressing the merits of Company's proposal, argues the Commission has the authority to authorize such discounts. C/LEC asserts the concept of just and reasonable rates encompasses implementation of discount rates for poor and elderly ratepayers, despite the fact the discounts are not cost justifiable.

Docket No. RPU-82-12
Page 53

MidAmerican Exhibit 8.1
Page 609 of 654

FINDINGS OF FACT

Based upon our review of the entire record in the proceeding, we hereby summarize our Findings of Fact:

1. The parties have agreed the 1981 calendar year is an appropriate test period.
2. Rate base should be calculated by using 13-month average account balances, as adjusted in accordance with our other findings.
3. Company's proposal to include a \$9 million adjustment to rate base to include the year-end unamortized balance of the costs of long-life property and extraordinary repairs for Cooper Nuclear Station should be adopted.
4. Staff's proposal to adjust the 13-month average balance recorded in the fuel account should be adopted.
5. Staff's proposal to exclude \$730,000 of land held for future use from rate base should be adopted.
6. Staff's proposal to adjust rate base to recognize the appropriate generation resources inventory for Company should be rejected.
7. It is reasonable for Iowa Power and Light Company to consider economic factors, as well as MAPP requirements, when planning electric generating capacity, and ratepayers should be relieved of the burden of paying a full return on investment in electric generating capacity.
8. Electric generating capacity exceeding 125 percent of Company's actual peak load is not necessary to meet demand and maintain a reasonable

Docket No. RPU-82-12
Page 57

31. An average, rather than year-end, capital structure, as adjusted, should be used to match Company's test period capital costs with its test period operational expenses and plant investment.

32. Staff's proposal to adjust Company's test period coverage capital structure to reflect the rollover of \$8.4 million matured debt at the new cost rate should be adopted.

33. Company's cost of embedded debt, adjusted to reflect the rollover of \$8.4 million matured debt at the new cost rate, is 8.204 percent.

34. Company's cost of common equity as shown by the record is 15.0 percent, and no upward adjustment to the cost of equity is necessary.

35. Company should be able to attract capital if allowed an overall rate of return of 10.883 percent.

36. Company's proposal to provide a ten percent discount in the monthly bills for electric service to qualified low income, elderly, should be rejected because it is unsupported by the evidence and such a discount should be decided by the Legislature.

37. Interest on refunds should be paid at a rate equivalent to the interest rate on 12-month bank loans to individuals, computed under each applicable interest rate for the period the overcollection was retained, compounded annually.

CONCLUSIONS OF LAW

The Commission has jurisdiction of the parties and subject matter of this proceeding.

IT IS THEREFORE ORDERED:

1. The tariffs filed by Iowa Power and Light Company identified as TF-82-121, and made subject to investigation in or made a part of this formal proceeding are hereby declared unjust, unreasonable, and therefore, unlawful.

2. On or before the expiration of forty-five days from the date of this order, Iowa Power and Light Company shall file revised tariffs setting schedules of electric rates as required by the findings of this order.

3. Rates contained in the revised tariffs designed to produce a revenue requirement of \$244,065 for Company shall be considered the lawful rates chargeable by Company since the date of the rates, which are the subject of this proceeding, were placed into effect subject to refund; rates contained in the approved tariff will continue to be considered the lawful rates chargeable by Company.

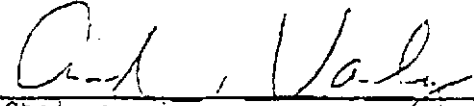
4. Iowa Power and Light Company shall amortize deferred Federal income taxes in excess of 41.63 percent of the accumulated book/tax timing difference for which normalization is required at a rate of \$871,000 annually over the remainder of the five-year amortization period originally ordered in Docket No. RPU-80-36.

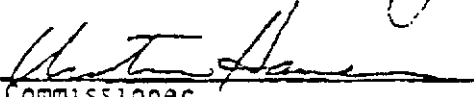
5. Iowa Power and Light Company shall continue to amortize deferred state income taxes as required in Docket No. RPU-80-36.

6. On or before the expiration of forty-five days from the date of this order, Iowa Power and Light Company shall submit for our consideration

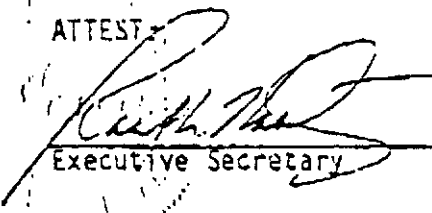
and approval a plan by which refunds shall be made to customers, in accordance with findings contained herein, together with sales tax and interest on excess collections, calculated on the basis of the interest rate paid on 12-month bank loans to individuals as set forth on the Federal Reserve Statistical Release E.12, and computed under each applicable interest rate contained therein for the period the overcollection was retained, compounded annually. Upon approval by the Commission of the refund plan, Company shall forthwith make refunds in accordance with such plan.

IOWA STATE COMMERCE COMMISSION


Chairman


Commissioner

ATTEST


Executive Secretary

Commissioner

Dated at Des Moines, Iowa, this 10th day of February, 1983.

IOWA STATE COMMERCE COMMISSION

Commissioners
 Andrew Varley
 Christine A. Hansen
 Paul Franzenburg

Secretary
 Robert G. Holzer

Iowa Power and Light Company

Docket No. RPU-82-12

"ORDER APPROVING STIPULATION AND TARIFF"

Issued December 30, 1983

Parties Served:

Pamela Prairie, Attorney
 Iowa Power and Light Company
 P. O. Box 667
 Des Moines, IA 50303

Curtis L. Ritland, Attorney
 Bradshaw, Fowler, Proctor & Fairgrave
 1100 Des Moines Building
 Des Moines, IA 50307

Tami O'Dell
 Iowa Citizen/Labor Energy Coalition
 P. O. Box 2057
 Des Moines, IA 50310

Russell L. Samson, Attorney
 David H. Goldman, Attorney
 Rogers, Phillips & Swanger
 510 Hubbell Building
 Des Moines, IA 50309

Vince Driscoll, President
 Citizens for Community Improvement, Inc.
 1909 Cottage Grove
 Des Moines, IA 50314

James R. Maret
 Consumer Advocate
 Office of Consumer Advocate
 Lucas State Office Building
 Des Moines, IA 50319

CERTIFICATE OF SERVICE

The undersigned hereby certifies that the foregoing document has been served this day upon all parties of record in this proceeding by mailing by first class mail, to each such party a copy thereof in properly addressed envelope and charges prepaid.

Date: 12-30-83
 Dottie L. De Staff

SEP 10 1983

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STATE OF IOWA

BEFORE THE IOWA STATE COMMERCE COMMISSION

IOWA COMMERCE COMMISS

IN RE: IOWA POWER AND LIGHT COMPANY } DOCKET NO. RPU-82-12

STIPULATION

Introduction

On April 21, 1983, Iowa Power and Light Company (Iowa Power or Company) filed a Petition For Judicial Review of agency action of the Iowa State Commerce Commission, challenging the Commission's Decision and Order dated and issued February 10, 1983, in Docket No. RPU-82-12 and Order Granting Limited Rehearing dated and issued March 22, 1983 in the same proceeding. The Company appealed certain portions of the Commission's decision related to the denial of recovery of Vandalia project costs, to the denial of deferral of Federal income taxes at the current statutory rate of 46%, to the denial of a 17.23% return on common equity and to the reduction of the revenue requirement on account of an excess capacity adjustment. On December 29, 1983, Iowa Power filed an Amended and Substituted Petition for Judicial Review, modifying its Original Petition to appeal only those portions of the Commission's decisions which concern the deferral of Federal income taxes and all issues related thereto, and to withdraw its appeal of all other issues appealed in its Petition for Judicial Review.

ARTICLE II

Purpose

This Stipulation has been prepared and executed by the signatures for the sole purpose of establishing a refund plan, including rates to be used in recalculating bills, for the purpose of distributing to customers amounts

computed at rates which became effective under bond in Pocket No. RPU-82-12 in excess of rates which would produce the electric revenue requirements of \$246,979,000 established by the Commission's Orders of February 10, 1983 and March 22, 1983 reflecting the use of a 46 percent rate in calculation of deferred Federal income tax liability. Nothing in this Stipulation is intended to relieve Iowa Power from its responsibility to make further refunds, if any, for the period covered by the refund plan specified in this Stipulation in the event that a rate less than 46 percent is finally determined after exhaustion of all administrative and judicial appeals, to be appropriate in the calculation of its deferred Federal income tax liability.

ARTICLE III

Joint Motion

Upon execution of this Stipulation, the signatories shall file the same with the Commission together with a joint motion requesting that the Commission issue an order approving this Stipulation in its entirety without condition or modification.

ARTICLE IV

Condition Precedent

This Stipulation shall not become effective unless and until the Commission enters an order approving the same in its entirety without condition or modification.

ARTICLE V

Privilege and Limitation

This Stipulation shall become binding upon the signatories upon its execution, provided, however, that if this Stipulation does not become effective in accordance with Article IV, above, it shall be null, void and privileged. This Stipulation is intended to relate only to specific matters referred to herein;

no signatory waives any claim or right which it may otherwise have with respect to any matter not expressly provided for herein; no signatory shall be deemed to have approved, accepted, agreed or consented to any ratemaking principle, any method of cost of service determination, or any method of cost allocation underlying the provisions of this Stipulation or be prejudiced or bound thereby in any other current or future proceeding before the Commission; and no signatory shall directly or indirectly refer as precedent to this Stipulation or that part of any order of the Commission referring to this Stipulation in any other current or future Iowa Power rate proceeding before the Commission except (1) with respect to an application for interim rate relief, provided, however, that if a signatory makes such a reference with respect to an application for interim rate relief, then, with respect to such application for interim rate relief, the other signatory shall not be bound by the resolution of the matter in this Stipulation identified by such reference, or (2) in response to such a reference by a party not a signatory to this Stipulation.

ARTICLE VI

Calculation of Refund Amounts

All bills for electric service computed at the rates which became effective under bond in Docket No. RPU-82-12 with service delivered during the period July 1, 1982 to October 14, 1983 will be recomputed using the refund rates specified in Article IX and the difference, plus accrued interest, franchise fees and sales tax, will be refunded. Interest on the above refunds will be calculated for each customer from an assumed date of payment 10 days after the business day in which the bill was originally prepared to the planned date of distribution at the interest rates for rate refunds set forth in the Commission's Order of February 10, 1983 in Docket No. RPU-82-12. For the period July 1, 1982 through March 31, 1983 interest rates used will be those set forth in

Federal Reserve Statistical Releases E.12(122) for 12-month direct consumer loans for other consumer goods and expenditures. For the period April 1, 1983 to the refund date interest rates used will be those set forth in Federal Reserve Release G.19 for 24-month personal loans. The average interest rates published by the Federal Reserve shall be deemed to be effective for these purposes as of the first day of the month following the availability of the published data to the Company. Interest shall be compounded annually. For purposes of interest calculation the planned date of distribution shall be 15 days later than the date which the Company intends to post refund credits to customer accounts. The interest rates are as follows:

INTEREST TABLE

<u>Period</u>	<u>Interest Rate</u>
07/01/82-09/30/82	19.42%
10/27/82-12/31/82	19.37%
01/01/83-03/31/83	18.33%
04/01/83-06/30/83	17.47%
07/01/83-09/30/83	16.57%
10/01/83-12/31/83	16.28%
01/01/84-Dist. Date	16.39%

ARTICLE VII

Distribution of Funds

Rate refunds for electric service under this plan may be combined with rate refunds for gas service, if any, available for distribution at the same time. Refund payments will be made to the account of customers with active accounts or the the account of customers with inactive accounts with unpaid balances. Refund payments of \$1.00 or greater to customers with closed accounts, or with inactive accounts with credit balances, or refund balances of \$1.00 or greater remaining where the refund is posted to the unpaid balance of an inactive account, will be made by check and mailed to the last known mailing address for the customer's account. Provided, however, that the Company may selectively transfer amounts to open accounts for the same customer at a new location.

Refund payments less than \$1.00 to customers with closed accounts, will be available upon their request at a Company office.

Iowa Power will use its best efforts to post refund payments to customer accounts within six weeks following the date of the Commission's order approving this Stipulation, and to mail refund checks approximately two weeks thereafter. A message explaining the refund will be mailed with each bill showing the refund and with each refund check.

Refund checks returned by the Postal Service will normally be voided. The Company will issue replacement checks to customers subsequently located following research using available records. Refunds not claimed will be disposed of as provided by the applicable laws of the State of Iowa, and as ordered by the Commission.

ARTICLE VIII

Records of Refunds to Customers

The following records will be prepared and be available for reference with regard to the calculation and payments of electric refunds to customers:

1. A detailed listing for each customer's electric billings during the period that the revised rates collected under bond have been determined by the Commission to be excessive showing the original and recalculated billings including franchise fee and service surcharges, the difference, interest, Iowa sales tax, identification of any billing for which manual intervention is required for determination of a proper refund, the total refund for each month, and totals for the full period. This record will be produced on microfiche and will be on file at the Company's Des Moines office. Copies of selected records will also be on file in the Company's offices at Council Bluffs and Knoxville.

2. A detailed listing of billing records for those accounts requiring manual intervention. Copies of this record will be on file in the Company's Des Moines office.
3. A listing of refunds credited to active accounts. Copies of this record will be on file in the Company's Des Moines office.
4. A listing of inactive accounts which achieved a credit balance upon posting of the refund credit. Credit balances so resulting will be refunded by Company check or transferred to another open account for the same customer as heretofore described. These records will be on file at the Company's Des Moines office.
5. A listing of refunds to closed accounts of less than \$1.00. Copies of this record will be on file in the Company's Des Moines office.
6. A refund check register listing each customer's account number, name, mailing address and amount of refund. Copies of this report will be on file in the Company's Des Moines office.

ARTICLE IX

Refund Rates

Tariff sheets contained in Exhibit I attached hereto, and hereby incorporated as a part of this Stipulation, are rates which produce the electric revenue requirements established by the Commission reflecting the use of a 46 percent rate in the calculation of deferred Federal income tax liability.

ARTICLE X

Reporting

Upon completion of the refund, the Company will report to the Iowa State Commerce Commission the amounts of the refund, interest, Iowa sales tax, and the total refund. Records of the refund processing will be available for review by the Commission.

IOWA POWER AND LIGHT COMPANY

OFFICE OF CONSUMER ADVOCATE

By Pamela L. Prairie
Pamela L. Prairie
Senior Attorney

By Gary D. Stewart
Gary D. Stewart
Attorney

666 Grand Avenue
Des Moines, Iowa 50303
Telephone: (515)281-2926

Lucas State Office Building
Des Moines, Iowa 50319
Telephone: (515)281-5984

Dated this 29th day of December, 1983. Pated this 29th day of December, 1983.

DOCKET NO. RPU-83-24

STATE OF IOWA

IOWA STATE COMMERCE COMMISSION

IN RE:

JWP 1984

IOWA POWER AND LIGHT COMPANY

DOCKET NO. RPU-83-24

DECISION AND ORDER

(Issued April 6, 1984)

APPEARANCES:

PAMELA L. PRAIRIE, TRACY B. BRIDGE, Attorneys, Iowa Power and Light Company, P.O. Box 657, 666 Grand Avenue, Des Moines, Iowa 50303, appearing on behalf of Iowa Power and Light Company.

GARY D. STEWART, ALICE J. HYDE, Attorneys, Office of Consumer Advocate, Lucas State Office Building, Des Moines, Iowa 50319, appearing on behalf of the Office of Consumer Advocate.

JOYCE J. GREEN, Polk County Legal Aid Society, 102 East Grand Avenue, Des Moines, Iowa 50309--1882, Attorney for Iowa Citizens for Community Development.

ROGER D. COLTON, Attorney, P.O. Box 1232, Ames, Iowa 50010, Attorney for Iowa Ratepayers Association, Inc.

I. PROCEDURAL HISTORY

On June 10, 1983, Iowa Power and Light Company (Company) filed with the Iowa State Commerce Commission (Commission) proposed electric tariffs identified as TF-83-333, representing a revenue increase of \$66.6 million annually, or a 27.1 percent annual increase. Company requested that these tariffs become effective on June 27, 1983. In the alternative, under the provisions of the proposed Louisa Phase-In Adjustment (LPA) Clause effective rates would be increased by lesser amounts during the first three years, but increased by greater amounts in succeeding years. Company proposed that during the first year the increased rates are effective the proposed tariff revisions as adjusted by the LPA Clause would increase

Docket No. RPU-83-24
Page 35

value of money. Company maintains it is necessary to recognize the time value of money because it does not receive the face amount of an offering, and thus, the actual cost to Company for money received is different than the specified bond coupon rate.

According to OCA, the cost of embedded debt is 8.923 percent. OCA argues the yield-to-maturity method is based on the erroneous assumption that the accumulated discount or premium earns an annual rate of return equal to the calculated yield to maturity. In addition, OCA claims the yield-to-maturity method calculates a higher cost of debt if the net proceeds are less than the principal amount of the debt issue, which is the situation Company is in. The Commission adopted the methodology for calculating debt costs employed by OCA witness Dr. Szerszen in previous cases.

In reply, Company argues the OCA methodology for calculating embedded debt costs will always yield an incorrect calculation of debt cost unless the premium equals the issuance costs gained through the sale of debt, which is an unlikely event. Moreover, Company claims OCA's method causes over-recovery of costs for issues offered at a net premium.

The cost-to-maturity method has been rejected by the Commission in previous cases. Re: Iowa Power and Light Company, 51 P.U.R. 4th 405, 424-25 (Iowa 1982); Iowa Public Service Company, 46 P.U.R. 4th 339 (Iowa 1982). Because the evidence in this case indicates that the total of the net proceeds of Company's debt is less than the total

Docket No. RPU-83-24
Page 36

principal amount of Company's debt, the yield-to-maturity method will result in a higher cost of embedded debt. Therefore, we find the yield (cost)-to-maturity method overstates the cost of debt in this proceeding and should not be used in calculating the overall rate of return. Although OCA's methodology may calculate a higher cost for debt issued at a net premium, this is not the case in this proceeding. We find the methodology employed by OCA witness Dr. Szerszen provides us with more reliable cost of debt and should be adopted in this proceeding. Therefore, we find the cost of debt is 8.923 percent.

Company witness Mr. Glahn testified that the cost of preferred stock was 7.948 percent. However, we believe it is necessary to recognize the gain realized on the reacquisition of securities to obtain the real cost of the remaining outstanding balance of the security. It does not appear that Company witness Glahn did so in his calculation of preferred stock costs. On the other hand, OCA witness Dr. Szerszen's calculation recognized the gain realized by Company by reacquisition of some of its stock. Therefore, we find the appropriate cost of preferred stock is 7.912 percent in accordance with OCA's calculations.

B. Cost of Common Equity.

The remaining disputed issue to be determined in calculating the overall fair rate of return is the cost of Company's common equity. Company argues its cost of common equity is in the range of 16.5 to 17.5 percent, while OCA maintains the evidence supports a cost of

Docket No. RPU-83-24
Page 37

common equity of no more than 14.1 percent.

Company relies upon Mr. Jeffries' testimony to support its estimate of the cost of common equity. Mr. Jeffries primarily relied on the DCF methodology in estimating Company's cost of common equity. However, we shall briefly address the other two methods employed by Mr. Jeffries to calculate the cost of common equity.

Mr. Jeffries' comparable earnings approach considered the earned returns of 67 unrelated industrial companies. Since the cost of common equity is the expected return on the market price, not the earned return on book value, Mr. Jeffries' comparable earnings on book value is not a reliable means of estimating Company's cost of common equity. Therefore, we find the cost of common equity obtained from the comparable earnings approach is not helpful in obtaining an accurate cost of common equity in this proceeding.

Mr. Jeffries also estimated Company's cost of common equity to be 17.5 percent based on his equity-debt risk premium analysis. As we have previously stated, the equity-debt risk premium methodology is based on the erroneous assumption that the risk premium is constant. In Re: Iowa Power and Light Company, ISCC Docket No. RPU-82-12 (February 10, 1983). Our position remains unchanged, and thus, we find the equity-debt risk premium methodology should not be relied on in estimating the proper cost of common equity in this proceeding.

As noted, Company witness Jeffries also applied the standard DCF methodology to estimate the Company's cost of common equity.

Docket No. RPU-83-24
Page 38

The standard DCF model is used to predict what returns an investor may reasonably expect from an investment under actual stock market conditions. The model establishes the cost of common equity by measuring the normal dividend yield (dividends per share divided by price per share) and adding in investor-expected growth rate. The model is expressed as follows:

$$K \text{ (cost of common equity)} = \frac{D \text{ (Dividends per share)}}{P \text{ (Market price per share)}} + G \text{ (Growth rate)}$$

Mr. Jeffries performed a study of Iowa resources and a study of 21 other investor-owned utilities of similar risk using DCF analysis. Mr. Jeffries calculated the dividend yield using common stock prices for the last six months of the test period and Value Line estimated 1983 dividend rates. He obtained a dividend yield of 12 percent for Iowa resources and a dividend yield of 9.5 to 12.5 percent for the 21 comparable utilities. Mr. Jeffries calculated the expected growth rates for the 21 comparable risk utilities for earnings, dividends, and book value. The resulting average of these three expected growth rates was 4.8 percent. The expected growth rate for Iowa resources for earnings, dividends, and book value averaged out to 4 percent. Based on Mr. Jeffries' DCF analysis, Company claims the cost of common equity should be found to be 16.5 to 17.5 percent.

OCA claims Mr. Jeffries' estimated cost of common equity is upwardly biased because of improper application of the DCF methodology. According to OCA, the dividend yield in the Company's estimate is

Docket No. RPU-83-24
Page 39

overstated because: 1) use of prospective period expected dividend by Mr. Jeffries, rather than the current dividend, fails to account for continuous compound of earnings, and 2) Mr. Jeffries included the July 1982 stock prices, which were unrepresentative of normal market conditions because the federal reserve tight money policy was still in effect at that time. In addition, OCA argues the dividend and earnings growth rate estimates are unstable because they can be distorted by changing payout ratios, and therefore, should not be relied upon in estimating growth rates. Disregarding the unreliable dividend and earnings growth rates, OCA claims Company witness Jeffries' Value Line book value growth rate results in a growth rate estimate of 3 percent, which is nearly the same as OCA's proposed 2.99 percent growth rate.

OCA witness Dr. Carol Szerszen testified that Company's cost of common equity was no more than 14.10 percent based on her DCF analysis. The 11.2 percent dividend yield used by Dr. Szerszen is the median of the August through December 1982 monthly dividend yields based on average stock prices for August through December of 1982 and the annualized fourth quarter 1982 dividends. OCA claims its use of the current dividend properly recognizes and accounts for continuous compounding of daily earnings. Company's growth rate was calculated using two methodologies by Dr. Szerszen. Dr. Szerszen obtained a 3.3 percent sustainable dividend growth rate on the basis of book value. She also obtained an average 2.9 percent growth rate from her log linear least squares book value growth rates analysis. Because

Docket No. RPU-83-24
Page 40

Company had not obtained the 3.3 percent sustainable growth rate, Dr. Szerszen opined that the 2.9 percent growth rate was more appropriate. Dr. Szerszen also utilized the random coefficient's growth model to estimate the cost of common equity for six Iowa rate-regulated combination gas and electric utilities. OCA argues the mean and median cost of equity of 14.02 and 14.08 percent resulting from this analysis confirms Dr. Szerszen's conclusion that Company's cost of common equity is no greater than 14.1 percent.

Company maintains Dr. Szerszen's DCF estimates are unreliable because of her "systematic understatement of both yield and growth components." According to Company, the use of the current dividend rather than the expected dividend was improper because the DCF price equation contemplates the prospective dividend. Company further criticizes Dr. Szerszen's total reliance on historical data to calculate growth rates and her failure to recognize allowances for underpricing, market pressure, and normal stock price variation. In general, Company claims its 16.5 to 17.5 percent estimate of the cost of common equity is supported by the evidence in the record.

We do not agree with either party's estimate of Company's cost of common equity. However, we believe the evidence demonstrates that the DCF model provides us with the most reliable estimate of Company's cost of common equity.

Mr. Jeffries analyzed stock price data from six months and Value Line's estimated 1983 dividend rate to compute the dividend yield. In

Docket No. RPU-83-24

Page 41

contrast, Dr. Szerszen relied on five months of dividend yields based on average stock prices from that period and the fourth quarter dividend of 1982. For determining the appropriate dividend yield in this proceeding, we believe it is more reasonable to use the average dividend yield over an 18-month period starting in January 1982. The 18-month period eliminates market and temporary aberrations in determining just and reasonable rates. Based on the 18-month data, we find the appropriate dividend yield is 11.54 percent.

Next, we must determine the appropriate growth rate. Company witness Jeffries considered growth rate for earnings, dividends, and book values. However, the growth rates for earnings and dividends are unreliable indicators because they are affected by changing payout ratios, and thus, we find they should not be relied on to estimate the cost of common equity. Dr. Szerszen obtained a 3.3 percent sustainable dividend growth rate on the basis of book value growth. We are inclined to adopt a growth rate consistent with the sustainable growth rate for book value since it is, in theory, appropriate to employ the sustainable growth rate in the DCF calculation. However, we cannot ignore the poor growth rate actually experienced by Company as evidenced by the average 2.9 percent growth rate resulting from the log linear least square's book value growth rates analysis performed by Dr. Szerszen. Thus, we find it is reasonable to adopt a growth rate of 3.2 percent. The resulting 14.74 percent cost of common equity is lower than the cost of common equity found appropriate in Company's

Docket No. RPU-83-24
Page 42

last rate proceeding which is consistent with the general reduction of capital costs in the market since the end of that proceeding.

Company had also proposed an adjustment to the cost of common equity for the cost of selling stock, for market pressure on stock price, and for normal market variation. We do not believe such an adjustment is supported by the record in this proceeding and therefore, find the adjustment should be rejected. Therefore, we find Company's cost of common equity should be set at 14.74 percent, which is within the range of reasonableness of capital costs based upon the record of this proceeding.

C. Summary.

Based upon our findings with respect to the contested issue as discussed above, Company should be able to attract common equity if allowed an overall rate of return of 11.165 percent as set forth in attachment 4.

V. EXCESS CAPACITY

In order to address the question of whether there is excess generating capacity in Company's generating system, we must deal with the sub-issues of whether House File 312 applies to this proceeding, what the appropriate reserve margin should be, and whether the peak load should be adjusted upward. Company has also proposed certain items to reduce generating capacity.